



HINTS FOR NEW TANDEM RIDERS - STOKERS



If you have ridden before you may already know much of the information below. It is provided, however, for riders of all levels of experience.

Major differences between tandem and single cycle

Longer	Complicates steering and negotiating bumps and hills
Heavier	Bigger bike and two riders
Slower	For braking, starting off and going up hills.
Faster	in a straight line and can be much faster going downhill
Balance	Riders must be well paired – the rider at the front should not be much smaller than the stoker, otherwise the bike will be unbalanced and dangerous.

Types of tandems

We have ten tandem bikes.

Four bikes are Hillbrick 27 speed road bikes which have a high bar at the back that the stoker has to climb over. 2 bikes are 30 speed Cannondale road bikes which have lower bars at the back. These bikes are fast and light. They have thin tyres and the pilot is generally leaning forward and down more while riding.

Two bikes are Raleigh flat handlebar recreational bikes with 24 speeds. These have nice fat tyres and an upright riding position. Two bikes are older 24 Speed Apollo tandems which are our heaviest bikes but have very easy gears for going up hills.

Each bike is a different size. We will try and match you with a bike that you fit most comfortably as pilot. However the fit may not be perfect. If the fit is very bad on all bikes you may not be able to ride comfortably.

Rider preparation

Remember – you don't need special cycling clothing – just sensible comfortable clothing that allows you to move around and pedal easily.

- For your legs: shorts, trackpants, light weight trousers (not heavy denim jeans),
- If you are wearing long pants make sure they won't get caught in the chain. Tuck them in your socks or put some elastic around them.
- For your top: lightweight clothing that can be taken off once you start to warm up. Long sleeves are recommended for sun protection.
- Sunglasses which also keep wind and bugs out of your eyes.
- Bright light colours are best so you can be seen.
- Gloves in winter.
- Joggers are probably the best kind of footwear. Make sure the shoelaces are tied firmly and won't come undone. Tuck the loose ends under the laces so they don't get caught in the chain.

If you take up cycling regularly you might decide to get some special cycling gear to be more comfortable and protected.

- Lycra cycling pants and tops – easy to move in, warm in winter, bright colours, padded under the bottom for extra comfort on long rides.
- A light weight safety shirt as you are at the back of the bike and can be seen by cars behind.

- Light weight cycling gloves can give protection from bike vibration and sun in summer.
- Cycling shoes for getting more power out of your pedalling.

Other recommended items:

- Bring a bike helmet (we can lend you one for your first try out rides – but if you enjoy cycling – please bring your own). They can be purchased from bike shops for about \$40. You cannot ride without a helmet.
- Bring water – the bikes have water bottle holders designed for bidons (water bottles with pop tops) which also fit small 600 ml softdrink type bottles. On a summer ride you may need a second bottle of water.
- Use sunscreen on any exposed skin, and sunglasses
- Money to buy morning tea or breakfast

Bike set up

You will need to get to the ride a bit early to set up properly. Your pilot will make sure the bike is ready to go and help you set your seat height if you are unsure how to do it.

Your pilot will be able to have a practice ride with you before you start off with the group – especially to practice how you are going to start and stop safely.

Communication

2 brains 2 bodies - Coordination and communication are critical.

Your safety is in your partner's hands and yours in theirs. Your pilot will tell you what is happening, especially if you cannot see very well when you are:

- starting
- Stopping
- Turning right / left
- Negotiating bumps, bollards, or branches
- speeding up to negotiate hills
- slowing down to wait for a car to pass without needing to stop the bike

Over time you and your pilot will work out what communication is needed when. If you become a good riding pair, less communication will be needed.

You can tell your pilot:

- what you are able to do or see (if you have a disability) so they don't offer help you don't need
- if you would like to know more about what is happening on the ride, where you are going and what places you are passing if you can't see well.
- if you need assistance when off the bike, for example, if you are with a group at a coffee shop, moving around tables and ordering food, getting introductions to fellow riders.
- if you have any other difficulties that might affect your riding.

Starting and stopping

Stopping and starting are the time when tandems are most likely to unbalance and the stoker and pilot crash to the ground. The weight of the two riders and the bike often means that unless the pilot and stoker can both get a leg off the pedals to brace against the fall they will not be able to avoid hitting the ground. Fortunately the bike is generally not in motion and the fall does not cause an injury. For this reason it is good to be systematic and careful about how you and your pilot stop and start pedalling.

Starting off (Two methods)

It is best to mount and dismount from left (curb side) of bike. If you unbalance when stopping or starting the bike is more likely to fall to the left (away from traffic).

1) Simultaneous push off while standing

Pilot stands over the bike, applies the brakes, and stabilises bike. Stoker stands over the bike at the back. Pilot leans the bike slightly to the left and takes the weight on their left leg.

While taking the weight on their left leg, using their right foot the stoker moves the pedals until the right hand pedal is pointing forward in the 3 o'clock position.

On the count of 3 take off with a firm push with slight delay/slow peddling so both pilot and stoker can slide their bottoms backwards on to the seat and get their left feet on the pedals.

2) Stoker sitting with feet on pedals

Pilot stands over the bike, applies the brakes, and stabilises bike while stoker mounts and puts their feet on both pedals. Stoker moves the pedals until the right hand pedal is pointing forward in the 3 o'clock position.

Pilot leans the bike slightly to the left and takes the weight of the bike and stoker on their left leg. Puts their right foot on the pedal ready to push off.

On the count of 3 take off with a firm push with slight delay/slow peddling so you can slide your bottom backwards on to the seat and you can get your left foot on the pedal.

If your vision is not very good, your pilot may suggest that you move the pedals to the starting position (right pedal pointing forward at 2 or 3 o'clock). If the pilot moves the pedal you may be hit in the leg unexpectedly.

Don't push off really hard (unless your pilot tells you to). Push off gently so that the bike does not start wobbling.

Your or your pilot may use clips to anchor your shoes to the pedals. Clips increase the efficiency of pedalling. If your or your pilot needs to clip in, when you start rolling on the bike, pause your pedalling if possible till the pedals are clipped in. Then start pedalling again.

With clip pedals, clipping in while your partner continues to pedal (or vice versa) can be challenging so practice getting the timing right on your clipping and pedalling.

Pedalling and gears

The bikes have 24-30 gears. Your pilot will pick a comfortable gear to ride in. This is so you can both maintain a steady and easy pedalling rhythm (cadence), even on hills. Unless you can see that you are going up a very steep hill, or your pilot tells you that you need to push hard, you should be able to pedal gently at all times. Tell your partner if you are finding it too hard to pedal so they can select a better gear.

If you pedal too hard unexpectedly it may make the bike wobble or veer off course and your pilot will have to work hard to prevent the bike unbalancing.

If you can't see well your pilot will tell you if you are going up a hill and need to pedal harder or pedal standing up (if you have practised this skill). Your pilot will tell you if you are changing gears if you need to pedal more quickly or slowly to maintain cadence and ensure that you are not trying to pedal at different speeds

At times you do not need to pedal and can rest with the pedals still. Sometimes these breaks in pedalling can be used to take the weight off your bottom by standing up a bit on your straight leg. Talk to your partner if you need to relieve weight from your seat.

Stopping

1. It is best to dismount on the left side of the bike. If something goes wrong this means you will overbalance towards the left (generally towards the side of the road or footpath) rather than to the right (on to the road).
2. Your pilot will tell you that you will be stopping and slow down. If you are using cleated shoes, unclip early.
3. Your pilot will probably put the right hand pedal in the down position (6 o'clock) so that when you stop both your left and right foot are near to the ground and your bodies are nicely balanced. It will then be just a little step to put the left foot down while maintaining good balance with the right foot still on the pedal.
4. Your pilot will count down (1,2,3) or say when you stop so that you both step off at the same time.
5. Put your left foot on the ground first. Then step off the right pedal too. It is important to get both feet onto the ground in case you unbalance.
6. Your pilot may get you to step away from the bike first.

Sometimes your pilot has to stop the bike unexpectedly and in a hurry. Try and get both feet down fast, even if you have not been warned!

Steering and holding on to the bike

The first time you ride a tandem, especially if you haven't ridden for a while, you may feel tense and hold on to the handlebars very tightly. Keeping very tense can cause some problems:

- your movements transfer to the bike and may make it wobble or make your pilot's seat move as the handlebars are attached to their seat post.
- if you keep tense for a long time, your muscles may get strained and sore

Practice relaxing your arms and body as you get used to riding so you are holding on firmly, but not straining. A lot of your stability comes from sitting on the seat and having your feet on the pedals – not from holding on to the handlebars tightly. On even ground, in slow speed riding conditions or while coasting slightly downhill you don't need to hold the handlebars which is handy for getting a drink.

Although you have handlebars to hold onto, these are fixed and do not move. So don't try to steer the bike. This is done by the pilot.

Avoid leaning into corners unless you are experienced.

Negotiating bumps

An experienced cyclist, when going up a curb or over a bump or hole, will generally stand up a little off the seat so that the impact of the bump is not transferred through the seat to their body.

If you need it, your pilot will tell you that a bump is coming so you can lift your bottom a little off the seat (just a few centimetres) for a few seconds till the bump has passed, then sit down again.

Walking with the bike

If you are walking with the bike your pilot can alert you to gutters, sloping pavements, holes or bumps, bollards and tight corners.

It is a good side to walk on the left of the bike (away from the road). Take care to walk a little away from the bike so that your legs do not hit the protruding pedals.

You may find it easy to walk with the bike by simply placing your right hand on the back seat and walking a little behind the seat. Your pilot can hold the bike by the handlebars and guide the bike. You can follow along by keeping contact with the bike seat but you don't have to hold the bike up or guide it as this is being done by the pilot.

Accidents and injury

All physical exercise involves the risk of injury. Cycling is a sport where accidents can happen. Some unexpected situations just can't be dealt with in time even by an experienced rider. You will also be riding a bike which may not fit your body size perfectly well. Your riding position on the bike may not be ideal. You may also be tense to start off with.

As a result, it is possible that:

- you may strain some muscles or feel soreness after a ride if you have not ridden for a long time
- you both may fall off, including on to concrete or bitumen. Generally falls are at low speed (while stopping and starting). So you may have some bruises or grazes which will heal quickly. But an injury could be more serious (such as a broken bones).

On the other hand, your pilot is an experienced rider and will try to guide the bike safely and avoid accidents. You are likely to be riding with a group of people and a group of riders is easier for cars to see and avoid. At least one rider is likely to have a first aid kit. Your helmet will give you very good head protection if you wear it correctly.

Cycling is a low impact exercise that is suitable and safe for almost everyone of any age or ability. It can improve your general fitness, your cardio-vascular system, and your general wellbeing. Any form of exercise will improve your health.

To try and minimise injury you should think about:

- Always wear a correctly fitted helmet. If your helmet is really old or has been dropped heavily it may have deteriorated. Replace your helmet every couple of years.
- Learn to set up your seat height in the most comfortable riding position and let your pilot know if you are not comfortable and something needs to change during the ride
- Practice relaxing your body if you are tense on the bicycle
- Speak with your doctor if you have some existing medical condition or are an older rider and you are not sure if you should ride
- Speak with a health professional or coach about warm-up stretches you can do before riding (or even better - each day) so that your body becomes more flexible and you will be less likely to get muscle strain.
- Speak with your pilot about your state of fitness or physical limitations that your pilot can take in to account when you are riding
- Use sunscreen, sunglasses and suitable clothing to give sun protection
- Membership of Pedal Power ACT includes comprehensive personal injury insurance and 3rd party liability insurance. This covers men and women, and also families. Information is available at www.cyclecover.com.au/webcontent24.htm. Information on how to become a member of Pedal Power, and the benefits of membership, is available at www.pedalpower.org.au.
- Membership of FIT (for women only) includes the same type of comprehensive personal injury insurance and 3rd party liability insurance particularly for the tandem riding project. There are details on how to become a member at www.fitact.org.au/membership.htm.
- Membership of other cycling bodies may include suitable insurance.
- FIT-Ability members (pilots, stokers, volunteers) are covered by public liability insurance and limited coverage for non-Medicare expenses through Visact.
- It is strongly recommended that you become a Pedal Power or FIT member to ride pilot with the FIT-Ability program. This insurance will be critical should anything go wrong when you are piloting.
- By becoming a member either of Pedal Power or FIT you not only receive insurance but you also support local cycling groups and receive benefits such as cycle shop discounts, advice about upcoming events you can participate in, and newsletters or magazines.

Before riding tandem you are asked to fill in a form acknowledging that you choose to take part in tandem riding and that you are aware of the risks.

